



Aluminium at the heart of history in the UK

By Nadine Firth, Editor, Aluminium International Today

THE BRITISH ALUMINIUM COMPANY LIMITED
 LAGGAN DAM
 LENGTH 700 FT.
 HEIGHT ABOVE FOUNDATIONS 170 FT.
 COMPLETED 1904



In 1929, The British Aluminium Company Ltd completed a major hydro construction programme of dams and pipework to carry millions of litres of water to new aluminium smelters at Fort William and Kinlochleven in Scotland. Today, only the Fort William (Lochaber) smelter remains and the owners, Rio Tinto, are currently reviewing its operations. Nadine Firth recently visited the area to delve into its rich history and learn how these communities were built on aluminium.

Current situation

After the recent announcement from

Rio Tinto that it is reviewing its assets in Lochaber, the Scottish government is reportedly working with the company to understand the potential impacts.

The smelter is one of the largest employers in the area and supports more than 150 full-time jobs. It is set amongst 116,000 acres of land, which makes the company the eighth biggest landowner in Scotland. The estate stretches from Kinlochleven, including the Mamore mountains and Grey Corries, to Laggan.

The Kinlochleven smelter was the first to close in 2000, followed by the smelter Lynemouth, Northumberland in 2012.

Kinlochleven

The railway came to Fort William in 1890 and as was the case around the UK, it attracted people. Hundreds of men came from all over to work and labour on The British Aluminium Company project and others became the first employees of the company.

In 1907, the Kinlochleven smelter was commissioned with the company harnessing two of the Highlands natural assets – water and hills – to create the Blackwater Reservoir and a hydroelectric plant. The villages of Inverlochy and Kinlochleven were built specifically to

provide housing for the workers and their families and Kinlochleven was the first village in Scotland to be provided with electricity as a result of the hydro-generating station.

The small hamlet, built where the River Leven meets Loch Leven, quickly became the thriving one-industry village of Kinlochleven. As the smelter developed, so did the community. The smelter employed more than 800 workers at times, making a major contribution to the economy of South Lochaber for almost a century. With strong international demand for aluminium, the village quickly grew to a

The Aluminium Story Visitor Centre

- The Aluminium Story Visitor Centre and Library uses imaginative audio-visual displays and a video presentation to tell how aluminium has been produced in Kinlochleven for the past 80 years.
- The science of the smelting process is explained and the displays describe the grand-scale engineering of the hydro-electric scheme which makes good use of the exceptional rainfall in the area to power the plant.
- Special thanks to the Aluminium Story for providing images and information for this feature.

thriving community of more than 1000 people.

The smelter's operator, Alcan Smelting and Power (UK) Ltd, announced in 1994 that, due to changing international patterns of demand, out-dated technology and economies of sale, it would close around the turn of the century. In March 1999, 96 people were employed in the smelter, with an anticipated closure date in June 2000. In June 2000 the smelter finally closed and this understandably had an effect on this community that was, to a large extent, economically and socially dependant on the industry.

In response, a multi-agency and community forum was established to address the regeneration of the area. An outcome of this group's work was the formation of the Kinlochleven Land Development Trust (KLDLT), now known as Kinlochleven Community Trust, a private company limited by guarantee, and with charitable status, that is working with the community in taking forward the strategy for redeveloping the village.

Fort William

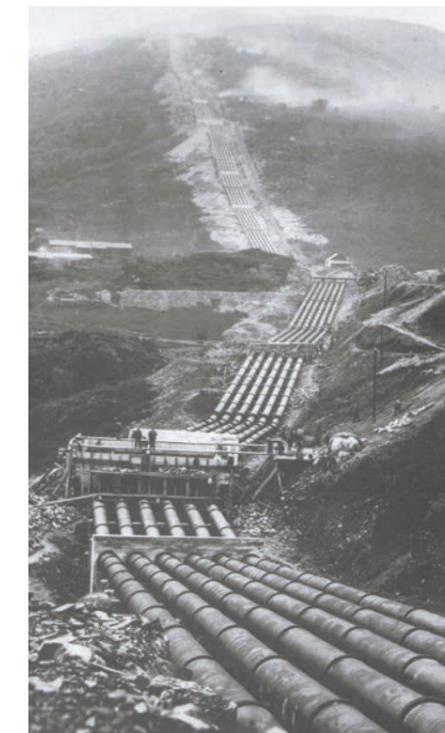
The Lochaber hydroelectric scheme was a hydroelectric power generation project constructed in the Lochaber area of the western Scottish Highlands after the First World War. Like its predecessor at Kinlochleven, it was intended to provide electricity for aluminium production, this time at Fort William, a little further north. The scheme was initially designed by engineer Charles Meik, but after his death in 1923, the scheme's realisation was left to William Halcrow, by then a partner in the company originally founded by Meik's father Thomas Meik.

The project was finally sanctioned by Parliament in 1921, but construction did not start until 1924; the aluminium smelter was established in 1929 and took about 95% of the 82,000 kW of power generated.

The scheme harnessed the headwaters of the Rivers Treig and Spean and the floodwaters of the River Spey (plus a



further eleven burns along the way). The Laggan Dam (213m long and 55m high) contained the flow of the Spean in a reservoir (Loch Laggan). A 4km tunnel then linked this body of water with another reservoir (Loch Treig) contained



by the Treig dam. From here, the main tunnel, until 1970 the longest water-carrying tunnel in the world, an enormous 24km (15 miles) long and 5m in diameter, was driven around the Ben Nevis massif. From the western mountainside, down five steel pipes, the water rushed towards the turbines in the powerhouse at the smelting plant.

Future

While the review of operations is underway at the Lochaber smelter, the future remains uncertain. One can only hope that the UK does not lose this huge chapter of industrial history. ■